NMFS FISHERIES OBSERVER PROGRAM
CATCH ESTIMATION WORKSHEET

OBS/TRIP ID	**A**
DATE LANDED mm/yy	**B** /
HAUL #	**E**

FISHING METHOD	**1**	CATCH ESTIMATION METHOD	**3**
Picked	1 ___	Weighed (Actual)	1 ___
Shoveled	2 ___	Volume to Volume	2 ___
Deckloaded	3 ___	Basket or Tote Count	3 ___
Conveyor System	4 ___	Captain	4 ___
Combination (comment)	8 ___	Tally	5 ___
Other (comment)	9 ___	Visually Estimated	6 ___
_____**1A**_____		Cumulative Sum Method	7 ___
HAUL NUMBERS WHERE		Combination (comment)	8 ___
DECKLOADING OCCURRED		Other (comment)	9 ___
_____**2**_____		_____**3A**_____	

** CATCH SHAPE, MEASUREMENTS & VOLUME

Comment and draw catch shape.

4

Rect./square (L x W x D)	1 ___ L _____	W_1 _____		D _____	= V ___	ft^3
Trapezoidal ([(W$_1$ + W$_2$)]/2xLxD)	2 ___ L ____	W_1 ____	W_2 ____	D ____	= V ___	ft^3
Triangular (L x W / 2 x D)	3 ___ L ____	W ____		D ____	= V ___	ft^3
Circular (π r^2 x D)	4 ___ r ____			D ____	= V ___	ft^3
Oval (r$_1$ x r$_2$ x π x D)	5 ___ r$_1$ ____	r$_2$ ____		D ____	= V ___	ft^3
Other/Combination (comment)	9 ___		**4A**			

Are measurements the same as previous haul?   NO   0 ___   YES 1 ___ **5**

** # SUBSAMPLING CONTAINERS USED	** VOL SUBSAMPLE CONTAINER	** TOTAL SUBSAMPLE VOLUME = # subsample containers used x volume of a sub-sample container	** SAMPLE WEIGHT MULTIPLIER total catch vol / total subsamp vol	** PERCENT SUBSAMPLED (total sub-samp vol / total catch) vol) x 100	**Volume of Subsample**	**Circular Shapes**
	Orange Basket 1___ 1.47 ft^3				1 Basket = 1.47 ft^3	r = radius
	Fish Tote **7** 2___ 2.65 ft^3				2 Baskets = 2.94 ft^3	r = diameter / 2
	Other 9___ ft^3				3 Baskets = 4.41 ft^3	r$_1$ = short radius
___**6**___	___**7A**___	___**8**___ ft^3	___**9**___	___**10**___ %	4 Baskets = 5.88 ft^3	r$_2$ = long radius
					5 Baskets = 7.35 ft^3	π = 3.14

** SPECIES	** SUBSAMP WGT (lbs)	** SPECIES	** SUBSAMP WGT (lbs)	COMMENTS
11	**12**			
				** Required only when using the volume to volume method.

Angular Shapes
A = area
V = volume
W = width
D = catch depth

Trapezoidal Shapes
W$_1$ = short width
W$_2$ = long width